

In the Claims:

Please cancel Claims 2, 3, 10, 26, 35, 36, 42, 56-58, 61, 71, 85, 100 and 108 without disclaimer or prejudice to presenting them in this or a later-filed application.

Please amend Claims 1, 8, 9, 16, 31, 34, 41 and 49 as follows:

B1

1. (Amended) A syringe for use with an injector system comprising a movement mechanism, and a control device operably associated with the movement mechanism, the syringe comprising:

- a body comprising a distal discharge end;
- a plunger movably disposed within the body; and
- at least one agitation element disposed within the body between the plunger and the distal discharge end, the at least one agitation element operable to agitate an ultrasound contrast fluid in the syringe when the syringe is moved by means of the movement mechanism operably associated with the injector system,

the control device operable to control the movement of the syringe induced by the movement mechanism to substantially maintain the homogeneity and integrity of the ultrasound contrast fluid without substantially impairing the diagnostic properties thereof.

B2

8. (Amended) The syringe of Claim 1 wherein the movement mechanism operably associated with the injector system is operable to move the syringe in one or more of circular, partially circular and linear motions.

B2  
9. (Amended) The syringe of Claim 1 wherein the movement mechanism operably associated with the injector system is operable to move the syringe in a rotational motion.

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B3  
16. (Amended) The syringe of Claim 13 wherein the recess comprises an annular recess.

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B4  
31. (Amended) The injector system of Claim 28 wherein the recess comprises an annular recess.

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B5  
34. (Amended) A syringe for use with an injector system comprising a movement mechanism and a control device operably associated with the movement mechanism, the syringe comprising:

a body comprising a distal discharge end;

a plunger movably disposed within the body; and

at least one agitation element disposed within the body between the plunger and the distal discharge end, the at least one agitation element operable to agitate an ultrasound contrast fluid in the syringe when the syringe is rotated by means of the movement mechanism,

the control device operable to control the rotation of the syringe induced by the movement mechanism to substantially maintain the homogeneity and integrity of the ultrasound contrast fluid without substantially impairing the diagnostic properties thereof.

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B6

41. (Amended) The syringe of Claim 34 wherein the movement mechanism operably associated with the injector system is further operable to move the syringe in one or more of circular, partially circular and linear motions.

B7

49. (Amended) A syringe comprising:  
a body comprising a distal discharge end;  
a plunger movably disposed within the body;  
at least one agitation element disposed within the body between the plunger and the distal discharge end, the at least one agitation element operable to agitate a fluid in the syringe; and  
an annular recess defined in the body of the syringe, the annular recess operable to accommodate the at least one agitation element.

✓  
Please add new Claims 112-143 as follows:

B8

112. The syringe of Claim 15 wherein the recess comprises an annular recess.
113. The injector system of Claim 30 wherein the recess comprises an annular recess.
114. The injector system of Claim 17, further comprising a control device operably associated with the movement mechanism, the control device operable to control the movement of the syringe induced by the movement mechanism.

B8  
115. The injector system of Claim 19, further comprising a control device operably associated with the movement mechanism, the control device operable to control the movement of the syringe induced by the movement mechanism to substantially maintain the homogeneity and integrity of the ultrasound contrast agent without substantially impairing the diagnostic properties thereof.

116. The injector system of Claim 115 wherein the control device is operable to control the intensity and/or frequency of the movement of the syringe.

117. The injector system of Claim 17 wherein the movement mechanism comprises a motor.

118. The injector system of Claim 17 wherein the movement mechanism comprises an accessory comprising a base, a surface connected to the base via a pivot joint, a motor and a linkage connected between the motor and the base and the surface.

119. The injector system of Claim 17 wherein the movement mechanism comprises a vibratory agitator.

120. The injector system of Claim 62, further comprising a control device operably associated with the movement mechanism, the control device operable to control the movement of the syringe induced by the movement mechanism.

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121. The injector system of Claim 64, further comprising a control device operably associated with the movement mechanism, the control device operable to control the movement of the syringe induced by the movement mechanism to substantially maintain the homogeneity and integrity of the ultrasound contrast agent without substantially impairing the diagnostic properties thereof.

122. The injector system of Claim 121 wherein the control device is operable to control the intensity and/or frequency of the movement of the syringe.

123. The injector system of Claim 62 wherein the movement mechanism comprises a motor.

124. The injector system of Claim 62 wherein the movement mechanism comprises an accessory comprising a base, a surface connected to the base via a pivot joint, a motor and a linkage connected between the motor and the base and the surface.

125. The injector system of Claim 62 wherein the movement mechanism comprises a vibratory agitator.

126. The injector system of Claim 77, further comprising a control device operably associated with the movement mechanism, the control device operable to control the rotation of the syringe induced by the movement mechanism.

B8  
127. The injector system of Claim 79, further comprising a control device operably associated with the movement mechanism, the control device operable to control the rotation of the syringe induced by the movement mechanism to substantially maintain the homogeneity and integrity of the ultrasound contrast agent without substantially impairing the diagnostic properties thereof.

128. The injector system of Claim 127 wherein the control device is operable to control the intensity and/or frequency of the movement of the syringe.

129. The injector system of Claim 77 wherein the movement mechanism comprises a motor.

130. The injector system of Claim 77 wherein the movement mechanism comprises an accessory comprising a base, a surface connected to the base via a pivot joint, a motor and a linkage connected between the motor and the base and the surface.

131. The injector system of Claim 77 wherein the movement mechanism comprises a vibratory agitator.

132. The injector system of Claim 91, further comprising a control device operably associated with the movement mechanism, the control device operable to control the movement of the syringe induced by the movement mechanism.

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133. The injector system of Claim 93, further comprising a control device operably associated with the movement mechanism, the control device operable to control the movement of the syringe induced by the movement mechanism to substantially maintain the homogeneity and integrity of the ultrasound contrast agent without substantially impairing the diagnostic properties thereof.

134. The injector system of Claim 133 wherein the control device is operable to control the intensity and/or frequency of the movement of the syringe.

135. The injector system of Claim 91 wherein the movement mechanism comprises a motor.

136. The injector system of Claim 91 wherein the movement mechanism comprises an accessory comprising a base, a surface connected to the base via a pivot joint, a motor and a linkage connected between the motor and the base and the surface.

137. The injector system of Claim 91 wherein the movement mechanism comprises a vibratory agitator.

138. The syringe of Claim 1 wherein the movement mechanism is connected to the body of the syringe.

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139. The injector system of Claim 17 wherein the movement mechanism is connected to the syringe.

140. The method of Claim 32 wherein the movement mechanism is connected to the syringe.

141. The syringe of Claim 34 wherein the movement mechanism is connected to the body of the syringe.

142. The injector system of Claim 62 wherein the movement mechanism is connected to the syringe.

143. The method of Claim 104 wherein the movement mechanism is connected to the syringe.

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